

Kunze (R. E.)

CEREUS GRANDIFLORUS

CEREUS BONPLANDII.

HISTORY, DESCRIPTION

AND

THERAPEUTICAL APPLICATION.

READ BEFORE THE

Electric Medical Society of the State of New York,

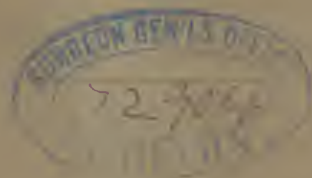
TRANSACTED BEFORE IT, ALBANY, N. Y.

October 21, 1875.

BY

RICHARD E. KUNZE, M. D.,

OF NEW YORK CITY.



41

ALBANY.

WELCH, FARMER AND THOMAS'S PRINTERS.

1876.

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Eclectic Medical Society of the State of New York,

IN ANNUAL SESSION AT ALBANY, N. Y.,

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Cereus Grandiflorus.

CEREUS GRANDIFLORUS (DE CANDOLLE)

NATURAL ORDER: CACTACEÆ.

Botanical Characteristics of the Flower. (See Plate I.)

By RICHARD E. KUNZÉ, M. D., of New York city.

Of this plant, the oldest variety of the night-blooming Cereus or Vanilla Cactus, which was discovered in Jamaica, W. I., in the year 1700, we have already given a lengthy description.* We now present a beautiful illustration of the plant in flower, drawn and colored from life by Mrs. Annie N. Thomas, artist, of this city. We were fortunate indeed to secure the services of an artist, who would not only make an accurate sketch, but likewise infuse so much *life* into every part of the picture. This plant is but one of many in our possession.

The bud, as here given, represents the same between the hours of 4 and 5 o'clock in the afternoon, and the flower fully expanded from 9 to 10 o'clock at night. By 1 o'clock in the morning the flower begins to show signs of drooping, and with the dawn of day all is over. This dazzling beauty, *Queen* of but a single *Night*, henceforth to be remembered only as a beautiful dream.

The flower is very fragrant and diffusive, more so than any other variety. The pistil is no longer than the stamens, and $\frac{1}{2}$ of an inch thick. The stigma is of stellate form, and does not project beyond the petals; the stigma is not over $\frac{5}{8}$ of an inch in diameter, just a little more than half the size of *Cereus Bonplandii*. The stigma is composed of 21 pointed bodies, and each ray $\frac{1}{2}$ an inch long. The number of stamens are 410. The latter are $\frac{3}{4}$ inch shorter than the petals, having yellow anthers, and of which a circular row is placed around the inside of the corolla, whereas the principal mass of stamens are reeling gracefully upon the floor of the corolla, assuming a eymbiform shape — boat-like as it were — against which the pistil is hard encroaching, so that its stigma may receive a shower of pollen neces-

* See article on "*Cactus*" in the Transactions of the New York State Eclectic Medical Society, vol. viii, 1875.

sary for fructification. The color of the inner row of petals is pure white, which are terminating in a hook; are $4\frac{1}{2}$ inches long and 1 inch wide. The petals are 32 in number. The next to it or more properly speaking, the first and innermost row of sepals, is of a corn yellow on the inner surface, and a delicate tint of a light blush color on the outer surface. The outer rows of petals on their inner surface are of an amber to a light roseate brown color, the former predominating, gradually darkening in shade in the last row, and of a corresponding but still deeper shade on the outer surface of the sepals until a dark pinkish brown or light chocolate color is reached. The sepals of the flower-tube are of the same deep shade. The sepals are 5 inches long and $\frac{1}{4}$ of an inch wide, and in number 72 — more or less according to the size of the flower, which varies on the same plant, sometimes considerably. The immature flower buds upon reaching the size of a walnut, when there is a rest of over two weeks in their growth, are covered with a fine silken wool, spirally twisted, of the same brownish color. The flower-tube or calyx is villous, each scale being surrounded by a tuft of fine light brown wool. The calyx is 6 inches long, and more of a greenish brown color.*

The reader will pardon us for quoting from *Appleton's Journal*, Vol. X, 1873, some beautiful lines in commemoration of the night-blooming *Cereus*, by Miss Emma M. Converse, who drank* in her inspirations while being enraptured by the unique birth — immaculate life — but not immature death of the flower — this rare and beautiful gem of nature :

"Many a time we have watched the unfolding of this superb child of the soil, but never before devoted a whole evening to a study of its brief life, from the earliest opening of the bud to the midnight grandeur of full inflorescence. The night-blooming *Cereus*, to whose short existence from dewy eve till morn it was our privilege to devote glad homage, was brought from a neighboring conservatory to be our evening guest.

"The bud, true to its destiny, gradually unfolds; the tube swells; the golden sepals spring out; the snowy petals expand; and from the

* It is with difficulty that the proper shade of colors of night-blooming *Cereus* are obtained when we consider that the flower is not fully expanded until late in the evening, too late for discriminating between the shade of colors. We can well account for the erroneous descriptions of these flowers, as found in many of the books. It was our aim to correct this as much as possible, and we have succeeded admirably by adopting the following plan, namely: Removing the flower from the plant by 10 o'clock, certainly not later than 11 at night, and placing the same in a bottle, filled with ice water; we then put in the same bottle or jar small pieces of ice — enough to take up one-third of the space and kept the same in an ice-box over night. This had the effect of freezing the flower-tube quite solidly in the layer of ice, without injuring the flower in the least, and preserving the colors and shape until noon of the following day. This enabled us to have the flower photographed as well.

depths within appear thread-like organs, gracefully resting on one side—the congregated stamens and pistil. With the most careful observation we cannot see a petal move, but none the less surely does the work of development go on. At eleven o'clock we are the only observer. The glorious creature has turned back her golden train; softest satin, richest silk, cannot compare with the creamy tissues which form her robes of purest white; while from within the golden-tipped stamens, arranged in a circle, form a fitting crown. The queen has put on her glorious apparel; she has reached the summit of her power; she sits enthroned, a miracle of floral beauty. Slowly her golden sepals turn further back. Slowly her pearly petals open more widely; slowly from her corolla project her curiously-wrought stigma and anthers, poised on thread-like filaments. We strain our eyes—we hardly breathe—hoping to catch even a slight perceptible movement. It is all in vain. We see the result, but we cannot discern the process. We take hold of it to examine it more closely, and a shower of pollen falls upon the white surface of the petals; fructification has already commenced.

ur/ “While we watch it we think of the tender care which has been bestowed on the nature of this solitary flower, and remember that countless thousands of its kind are this very night blooming in lavish profusion in the forests of tropical America—magnificent in the perfection of native development; exhaustless in variety; towering in height; clustering in blossoms; overpowering in perfume; displaying their graces where foot of man has never trod, where eye has never gazed, where human sense has never inhaled their fragrance.

“While we are busy with our thoughts, excited by the unnatural stillness, and feeling as if there were conscious life in the flower, slowly and solemnly the clock strikes the midnight hour, and we know that our charming queen will gather up her snowy train and lay aside her golden crown. Her short life is ended; her day is gone. We cannot see her brightness fade, and putting out the lights we leave to darkness and death the beauty, evanescent as a dream, and so soon to pass away.”

A curious fact to be mentioned is that *Cereus grandiflorus* has culinary as well as medicinal properties. Some epicure had conceived the idea of utilizing the flowers of *C. grandiflorus* in that way, as stated under Miscellanies in “*Flore des Serres et des Jardins de L'Europe*, Vol. V., p. 488 (Ghent, 1849.*

* Culinary use of *Cereus grandiflorus*. According to the assertion of Mr. J. L. Sweeting a correspondent of the “*Gardener's Chronicle*,” the flower buds of this beautiful Cactus, taken at the time of opening, furnish an excellent salad. Such a dish possesses at least all the merits of a rarity, and it is for this reason that we note it for our readers.”

CEREUS BONPLANDII (PARMET).

Botanical Characteristics of the Flower and Plant. (See Plate 2.)

By RICHARD E. KUNZÉ, M. D.

About the identity of this variety there seems occasionally to be some doubt. Plants in every respect the same, but coming from different collections, are sometimes labeled otherwise. This variety, of which a general description may be found in our article on "Cactus," (See Transactions, Vol. VIII), is known among florists as Bonpland's Cereus, the White Grandiflora or night-blooming Cereus. Having flowered this variety during the past summer, we noted all the particulars in which the flower differs from that of *Cereus Grandiflorus*. Our friend, Mrs. Annie N. Thomas, took some very fine sketches at the time, and from connoisseurs we have had the assurance that the fac simile of the plant, as represented herewith, is as perfect as it well nigh could be.

Before taking up the flower a minute description of the plant will not be out of order, notwithstanding that a general statement regarding its habits has been given previously. The stems of this Cactus, which are nearly all quadrangular, very few being pentangular, and averaging one inch in diameter, have very few short spines. The pulvilli, or bunches of spines, are from half to one inch apart. Each pulvillus is covered with white wool, from the surface of which project the spines, giving the plant a very neat appearance, contrasting greatly with those of *Cereus Grandiflorus*. The pulvilli are more crowded toward the terminal end of each stem. Every pulvillus or areola is studded with from six to eight spines; the three or five upper ones are from one to one and a half lines in length, light brown and very thick; the two or three lower ones from two to three lines in length, whitish and very soft. The diameter of each spiny cushion or pulvillus is one line. From these pulvilli, also called spiniferous areola, or very close to it, burst the young bud or flower. If the latter, it is then called the floriferous areola, and the point where the epidermis bursts is of a deep pink tinge. This pink shade is continued along the ridge of the ribs of all the young stems, and when the wood has finally



Cereus Bonplandii.

hardened and before six months old, all traces of pink are lost. The tips of all the young branches are beautifully pink. The stems, if five-angular are slightly grooved, not so much or very trifling if quadrangular. The young bud at first is intensely pink, and shortly afterwards covered with a fine white silken wool, spirally twisted near the tip, until the bud is of the size of a walnut. These buds resemble, though not in shape, a whitish silkworm cocoon, and are very ornamental in appearance. As the bud enlarges the pink becomes more neutral in color, the same as would be the result of mixing pink and yellow together. The silken wool is finally disposed of in each of the pulvilli of the flower tube, giving them a tasseled appearance. It is fully four weeks from the time the bud makes its exit from the epidermis until it is fully expanded, and during the last twenty-four hours it swells and elongates at a rate perfectly astonishing. At about 2 o'clock in the afternoon the now mature flower bud is making visible efforts to unfold its hidden treasure. By 4 o'clock the white petals, yet partially hidden beneath the pinkish sepals, like the rows of ivory between the rosy lips of a maiden, make their appearance, but not until the approach of night, has the grandest of all the flowers reached the zenith of its unrivalled splendor. Contrary to previous reports, this variety of night-blooming *Cereus* has no fragrance whatever.

The flower, when fully expanded, is ten inches in width. The flower and tube twelve inches long. The petals are not of so clear a white as in *Cereus grandiflorus*, and number in the centre row, 24, averaging from $\frac{3}{4}$ to $1\frac{1}{4}$ inches in width, and 4 inches in length. The sepals or outer rows of petals, improperly speaking, are 56 in number, recurving gracefully upon the flower-tube. Sepals are 5 inches long, on the inner side of a light amber to corn color, and on the other side of a light neutral pink to pinkish brown. A few of the sepals were intermediate. The pistil, surrounded by 300 stamens, projects to within $1\frac{1}{2}$ inches from the tip of the corolla. The stigma is stellate, with 14 points or rays, $\frac{3}{4}$ of an inch in diameter, and yellow. There is a single row of stamens encircling the petals. But the large mass of recurved stamens surround the pistil, and their golden anthers closing in upon the stigma. The flower-tube is 7 inches long. On the outside it is of a neutral pink, and inside more of a pea-green tint. Flower opened at 8 o'clock P. M. and closed 2 o'clock A. M. In Mexico this plant, by means of its rootlets, sometimes ascends trees to the height of thirty feet and over. Color of stems a dark green.

This variety of *Cactus* is such a positive remedy in the cure and palliation of cardiac disease that one must observe its action in order to appreciate it fully. In Mexico, where it thrives luxuriantly, it appears to have been used long ago in the treatment of fevers. A

Mexican lady, who recognized this plant in my office as the "fever plant" of her native country, stated that it was administered in the form of a tea made of the bruised stems, which were boiled in water, drank *ad libitum*, and very effectual in breaking up the fevers of that country. Not having tried it in such a way and for that purpose, we cannot bespeak for it the result here claimed, but do not question the veracity of our frank informer, who admitted that while in Mexico she had never taken any other medicine, excepting the leaves of the Aloes for bilious disorders, and Cactus for fever. We are convinced, however, that it has no control over the pulse as an arterial sedative, having given it in a case of delirium tremens, in largely repeated doses, without the slightest effect whatsoever upon the circulation. It is as a nerve sedative that we call your attention again to this article, and one much stronger than the old variety of *Cereus grandiflorus*. Whether its superiority lies in the fact that we prepare a tincture from the stems only, therein differing from that of *Cereus grandiflorus*, which is made from both the stems and flowers, we cannot say, but venture the opinion that the properties of the stems and flowers of Cactus differs nearly as much as the rose from its thorny stems. We have not had an opportunity of making an analysis of this plant, and cannot, therefore, set up a different hypothesis at present.

CLINICAL RECORD OF NEW CASES TREATED WITH *CEREUS BONPLANDII*.

Mrs. Josephine O., age 60, called for advice, Dec. 16, 1874, suffering from stenosis of the left heart, afterward resulting in aneurism of the aorta. Of the sanguine-encephalic temperament. Had suffered intensely for two weeks on taking any exercise, with cardiac pains passing from the apex to the base of the heart, thence across right breast, followed by palpitation and severe dyspnoea; heart felt as if squeezed during paroxysm; pulse 96, regular and wiry; vertex hot, throbbing violently during paroxysms; extremities cold and numb; countenance pale, pinched and anxious-looking; tongue white, mouth parched, much thirst, and no appetite; could not lie on right side or back at all; went to bed with a very apprehensive feeling; woke up regularly every night with severe dyspnoea, lasting 1—2 hours, and palpitation; rose with tiresome feeling, and œdema in ankles; could not walk two blocks without resting and grasping for some support. Had complained of a dry cough for six weeks previously; taken nauseant expectorants; got well without expectorating. Could not examine the case critically then on account of having to visit some diphtheritic cases immediately, so I gave her Tinct. *Cereus Bonplandii* 3 iv—dose gtt. xv at once, and gtt. x every two hours thereafter, till relieved of pain and palpitation. Next morning called early to inform

me of the gratifying result of medicine. First dose had relieved her of intense palpitation, lessened dyspnœa, and increased capillary circulation. Could walk to and from the cars without much trouble; no pain or dyspnœa. Slept comfortable, awoke once, took medicine, and in the morning found herself lying on her back and right side, first time in two weeks. Auscultation revealed the heart laboring violently, palpitation causing strong parietal vibrations, particularly to the right of the sternum, between second and third ribs. Chest upheaval appeared very marked over large vessels; sounds regular, but intensified in volume, loud and muffled in character, followed by a bellows murmur. My diagnosis was mitral regurgitation, with congestion of lungs, which opinion was supported by Prof. R. S. Newton, who happened to come in and examine the patient likewise.

Ordered her to continue treatment.

Dec. 18th. — Was sent for in haste that evening. Had felt pretty well up to that morning, when, in putting on her shoes, she was taken with a sudden faint feeling, followed by a general muscular prostration, resulting in chills on attempting to make the least exercise, which continued throughout the day. Had neither pain nor dyspnœa. Gave her a few doses of *Viburnum Compound*, which removed prostration. Pulse 90, and soft. Ordered *Tinct. Cereus Bonplandii*, gtt. x every four hours thereafter.

Dec. 19th. — Saw her in the afternoon, feeling splendid, good appetite, and had no cardiac pain or palpitation, not even after exercise. Pulse soft — 96.

Dec. 23d. — Had felt very well up to date, attending to all her household duties; slept well. More painful and tiresome feeling in limbs, and respiration not so free. Pulse 90, soft and regular. Ordered *Tinct. Cereus Bonplandii*, gtt. x three times a day.

Dec. 28th. — Taken with a dry, nervous cough, no expectoration; exercise tiresome, producing dyspnœa; very seldom palpitation, and at apex only; no pain; going out in the cold air, or ascending a stair, rapidly causing dyspnœa. Pulse full and soft — 90. Continued same medicine.

Jan. 7, 1875. — Overworked herself; began to feel worse again; much dyspnœa, general prostration, no appetite, pulse accelerated, and free from all pain.

Jan. 8th. — Noticed vibrations along the trunk of aorta; felt bad.

Jan. 10th. — Had severe cramps in her legs all night; dyspnœa gradually increasing; taken no medicine in three days; did not want to get up out of bed any more.

Jan. 11th. — Getting worse generally; refused food as well as medicine. No palpitation in cardiac region; pain along right side of trachea, from sternum to larynx, and feeling as if there was some ob-

struction there. Pulse small and dicrotic; pain at apex of heart, passing across right breast. Took a few doses of *Tinct. Cereus Bonplandii* again, to relieve cardiac pains and dyspnœa.

Jan. 13th. — Not having proper care, and gradually losing her strength, she decided to go to St. Francis Hospital, in this city, where she was entered as suffering from steno-mitralia, and treated for such for a week. From the rest she was getting there, dyspnœa decreased, and she felt better. Took very little medicine.

Jan. 20th. — At a consultation held over her case, it was decided to be an aneurism of the ascending aorta. Coughs a good deal, which causes chest pains. Had iodine painted all over her chest, which caused a copious expectoration of phlegm, and from increased coughing brought on more cardiac pains.

Jan. 28th. — Cough disappeared after ceasing to paint chest with iodine. Palpitation at base of heart, but not severely so.

Jan. 31st. — Cheyne's symptom well marked; little dyspnœa; feet and legs œdematous as far as knees; cannot lie on her back any longer; has to sit up in bed; orthopnœa.

Feb. 11th. — Less dyspnœa again, but cardiac pains increased instead. Feels comfortable; appetite fair; feet and ankles swell again.

Feb. 13th. — Worse again; anasarca involves thighs; severe dyspnœa; cardiac pains; took no food in four days, excepting three crackers; wild stare in her eyes; very irritable. Had hypodermic injections of morphia given her, to afford sleep. Palpitation over base of the heart, not so severe as formerly; pain in intercostal cartilages of second and third ribs, near sternum. Pulse small, soft — 100; skin dry; thirst.

Feb. 21st. — Intense anasarca of lower limbs; had not sat up since the 18th, and no appetite whatever. Skin very hot; great thirst; Cheyne's symptom,* as quoted by Stokes, very marked; takes no medicines any more. Dr. Tyndale, the attending physician, informs me that the aneurismal tumor is of the true kind, involving all the coats of the aorta, and is located rather anteriorly to the arch of the aorta, contrary to usual occurrence, thereby causing absorption of the costal cartilages from erosion, and coming nearer the surface. Left sterno-clavicular and costo-sternal region under first rib bulged considerably, with palpitation over the same. Pulse quick, dicrotic and intermittent — 120; very drowsy, the same as carbonic acid poisoning.

Feb. 25th. — Daily getting worse; limbs swollen enormously, and cold; pulse feeble and irregular; palpitation over large vessels; respi-

*The respiration comes and goes in ebbs and flows, gradually deepening into full respiration, then fading away into one or two complete remissions of respiration, almost the counterpart of dyspnœa.

ration easier; at times comatose; eats nothing; takes morphia to relieve pain.

Feb. 28th.—Sinking fast; recognizes friends with difficulty, and continued nearly the same up to March 4th, when her intellect brightened up for the last time. Pulse small, quick and dicrotic; much fever; skin burning hot; intense thirst; upper body emaciated to skin and bone: taken no food in fourteen days; some dyspnœa, but little palpitation; body becoming discolored; the nose, and for some distance around it, of a shining bluish-black; fingers bluish-black up to metacarpal joints, and toes the same; legs all covered with large and small livid or black spots up to thighs; extremities very hot; no pain anywhere; coughs at times; cyanosis very marked.

March 5th.—Died without any struggle, 2 o'clock A. M., after which the whole body turned black very rapidly. The post mortem examination revealed the fact that the direct cause of death was from embolism, a clot of blood becoming dislodged from the aneurismal sac, which formed an embolism in the arch of the aorta, thereby arresting the circulation very suddenly, causing instant death. There was œdema of the left lung. The aneurismal tumor or sac was of the size of a small hand as with the fingers compressed, and two-thirds of it were filled with fibrinous clots. There was atrophy of the heart, and the pericardium filled with blood.

CASE II.

Cardiac Neuralgia.—Mrs. Benjamin L., of Peekskill, N. Y., age 73, came under the treatment of W. D. Chesebrough, M. D., of this city, March 20, 1874. Had been told by her physicians previously employed that she was affected with pericarditis and stenocardia. Under constant treatment for the last fifteen years, with no decided relief at any time. Of the sanguine encephalic temperament, with a very susceptible constitution. Always active, and, therefore, frequently attacked with angina pectoris. Much exercise, or exposure to a lower temperature or damp atmosphere, as for instance in a cellar, was sufficient cause to bring on a paroxysm of cardiac pains and subsequent dyspnœa. Could not sleep on her back at all. She was under the use of gelsemium for a little while, and this afforded some relief after taking considerable of it. She was next put under *Tinct. Cereus Bonplandii* $\frac{3}{4}$ ii; ordered to take gtts. x in water three times a day. Had relief from a few doses, and enjoyed an immunity from subsequent severe attacks, notwithstanding that she attended to all her household duties and light chores of the milkroom in the cellar. Could sleep on her back without any inconvenience since taking this medicine.

Her daughter returned for more medicine, February 19, 1875, and stated that her mother was loth to admit the good result of *Cereus Bonplandii*, as she had no faith in tasteless medicines, having previously used stronger and more disagreeable preparations without any good result. Notwithstanding this asseveration, she acknowledged a better result taking the medicine in five, than ten drop doses. Would not be without it any longer.

CASE III.

Irritable heart with nervous palpitation. — Mr. John D., of this city, age 44, placed himself under my care February 3, 1875; by occupation manufacturer of segars. Nervous temperament. Had complained for the last three days of a pain commencing in the left axilla and passing toward the heart. Palpitation marked with parietal vibration. Pulse soft and full—60 per minute. Had an incubus in praeecordia which he described as follows: "Satan was seated upon the left shoulder, holding the heart in his claws as with an iron grip and tightening his hold incessantly, followed by a mighty effort on his part to shake this demon off." Coughing or sneezing from the inhalation of tobacco dust, causing darting pains to shoot from the left nipple backwards, almost taking away his breath. Respiration oppressed, sighing a constant symptom.

A tingling, twitch-like feeling under the skin, from the excitation of peripheral nerves, amounting to tremors when he attempted to fix his mind upon any one object. Dejection in general. In mind, very apprehensive, and when the hour of 3 o'clock A. M. arrived, woke up with a feeling as if his back was broken in two across the apices of scapulæ. This attack appeared to have been caused by a constant suppression of strong emotions, occasioned by the loss of his adopted son, a year ago. Prescribed *Tinct. Cereus Bonplandii* 3 iij.; of which to take gtts xv immediately and gtts x every two hours afterwards till relief was obtained. After the fourth day of taking the medicine, the pain and oppression of praeecordial region had subsided entirely. Pulse normal—72. Composed feeling of mind and body. After the ninth day of treatment the pain across scapulæ had left likewise. Nerves quiet. Sleeps well. The cardiac pains passed off in the direction of right pectoral region and have not returned up to the present time. The health of this patient had been good always, and not addicted to the use of strong drink. Yet much of this irritation may have been the result of incessant smoking.

CASE IV.

Angina Pectoris; complicated with hemorrhage of the lungs, the result of rheumatic pericarditis. This patient, J. N. Betts, M. D., of Pulaski, N. Y., a member of the Eclectic Medical Society of Oswego County, wrote to me under date of March 15, as follows:

"In February of 1866, I was suddenly attacked with inflammatory rheumatism in my ankle, but in four or five hours it left there and settled on my heart and lungs, causing intense suffocation, anxiety and palpitation, resulting in a few hours in hemorrhage of the lungs, which continued for three days. The usual remedies, such as counter-irritation, anodynes, arterial sedatives, etc., were used, but from that time I have been troubled almost constantly with palpitation, pains in the chest and heart, difficult breathing, especially upon slight exertion, and every few months with slight hemorrhage. During the fall and forepart of this winter have had slight attacks of 'angina pectoris,' and the last one was so severe that asphyxia took place, and my friends say I was for at least fifteen minutes unconscious and unable to swallow.

"My remedies have been such as our most popular works recommended, but without very much benefit. My pulse, for the last eight years, has never been less than 90, unless under the influence of veratrum or of digitalis. Since taking the *Cereus Bonplandii*, December 8, 1874, my pulse has gone down to 78, the pains in my chest have nearly ceased, but one slight symptom of 'angina pectoris,' have not lost a day after taking it a week, and have taken no other medicine since I commenced using this. In addition to the medicines I took previously, a few of which seemed to help me for a time only, such as macrotys, phytolacca, gum-guaiac, colchicum, propylamin and bicarbonate of potassa; I was also blistered, cupped, and used irritating plasters for a long time."

As previously stated, we prepare this tincture from mature stems without the flowers, contrary to the old custom.

CASE V.

Angina Pectoris.—This patient, J. Milton Saunders, M. D., LL.D. Professor of Chemistry in the Eclectic Medical College of New York, being so well known by the profession of this country, we cheerfully give him the opportunity to state his own case, under date of April 12, 1875:

"At the request of Dr. R. E. Kunzé I shall attempt to write out a plain statement of my symptoms and of the medicinal effects of the

Cereus Bonplandii as applied to them. It is necessary to say that I am of the encephalic temperament and for two years past have been subject to unpleasant attacks of nervous irritability and apprehensive feelings regarding the state of my health. In all other respects I have enjoyed good health, with the exception of an occasional attack of dyspepsia. It was in the early days of November, 1874, that those symptoms made their appearance—at least in an aggravated form—without a note of premonition. Soon after I had taken a short promenade, the weather being cold and disagreeable, I was suddenly taken with a severe pain in the region of the heart and extending across the sternum. This pain was not so acute as it was heavy and strong. If I could compare it to electricity (and it would be an apt one), it might be likened to, not an *intensity* one, but one of *quantity*, for it appeared to be heavy, strong and full, and not acute. Each paroxysm was accompanied with great mental depression, which appeared to be a concomitant of the disease. The dyspnoea shortly after became so intense that my case resembled one of congestion of the lungs. Under various kinds of treatment life was barely kept in me, so great was my suffering, mentally and physically, coupled with the fact that nothing more could be done for me, it was not calculated to relieve in any way the depression of spirits. Inhalations of chloric ether and tar was the last remedy resorted to. Could not take the least exercise without bringing on paroxysms of intense cardiac pains, accompanied with mental anxiety and dyspnoea. Surface generally cold. In going around the block of houses to the Eclectic Medical College, I usually had to stop and rest several times on the way and again after entering and before lecturing to the class. Even during the delivery of my lecture it often proved too much of an exertion for me, so that I had to desist sufficiently in order to let a paroxysm pass off, before I could conclude my remarks. Finally I thought that I should have to give up lecturing altogether. It was on the 12th day of November, having just delivered a lecture under very aggravating circumstances, that Dr. Kunzé met me in the lecture room and proposed an examination into my case immediately, for the purpose of testing the effects of *Cereus Bonplandii* on me, if the circumstances connected with it, warranted the application. As I had previously been subjected to many examinations made by my colleagues, who managed to agree as doctors often do, without concurring as to the real facts of the case, I could not very well refuse. Having already been told that I was affected with an aneurism of the aorta, thereby corroborating a previous opinion given by an eminent physician of Macon, Ga., nearly a year ago, I was desirous of having every one's opinion on the subject.

Submitting to a hasty examination by the doctor in another room without any fire, where I dared not remove sufficient of my clothing

to make it a critical one, I was told that my case was apparently one of "*Angina Pectoris*." Pulse 96, regular but very feeble. Marked dyspnoea ascending a stair. A feeling of apprehension and an incubus in the præcordia. The doctor prescribed:

Tinct. Cereus Bonplandii, $\bar{3}$ ss.

Sig: Take ten minims in water, three times a day, till relieved.

In twenty-four hours afterward, I felt less nervous and in a few days was enabled to take more exercise with less dyspnoea following. Cardiac pain not so severe. Pulse reduced to 84, with a better rhythm. Could walk to and from the college with less fatigue, and lecture with but little inconvenience. I could also lie down and sleep on my left side again, a thing I had been unable to do for two years past. Improving so very encouragingly, I got somewhat careless again in taking the medicine regularly, and therefore when I perceived myself getting worse, imagined that the remedy had lost its effect on me and finally ceased taking it altogether. The fact was I had lost all faith in any medicine until Prof. Newton assured me that I ought to continue it. This was about the middle of January, 1875. Pain returning with renewed strength, I then suspected that the *Tinct. Cereus Bonplandii* had done me some good.

I then commenced to take this remedy again with more confidence; I took it regularly three times a day in doses of twenty minims. I now felt a slow but assured sense of relief, and after taking the same for three months, I ceased to take it any more, as I had got relieved of the pain.* The throbbing of the heart had entirely subsided; its rhythmic beating was reinstated, and synchronously with the steady pulsations of the heart, came back the more joyous pulsations of health. I had kept a close account of the effects of the remedy. I noticed that if overdoses were taken, such as from thirty to sixty minims, the effect produced was a sense of fullness, a pressure in the temporal arteries, which often extended through the whole of the cerebral mass. During this time the stomach would experience a curious sensation, but indescribable, yet it might be likened to a very gentle current of electricity passing from the left to the right epigastric region. These effects both of the brain and stomach would soon pass away. But during these peculiar sensations of the stomach, there was frequently experienced the well-known sensation of nausea. I am inclined to think that another effect of the *Cereus Bonplandii*, is to lessen the beats of the heart or rather to render them softer and less forcible. The latter, however, is not so decided an effect as the action upon the heart. In conclusion I am of the opinion derived from my

*When we last saw Prof. J. M. Saunders, in the early part of last September, he seemed to enjoy most excellent health.

own observations, that the *Cereus Bonplandii* is a valuable remedy in heart diseases generally, and especially that form of diseases, in which there are symptoms of "*Angina Pectoris*." That this agent is possessed of other medicinal properties not yet ascertained, there is no doubt. Further experience will prove this and give to our *Materia Medica* another valuable remedy discovered by an Eclectic physician. It is much to be regretted that there are not in the profession more such men, who, amid the duties of an active and laborious profession, still find time to devote to that study which will benefit posterity and which, in a future generation, will confer upon them the thanks of their fellow men."

CASE VI.

Aortic Stenosis—The patient, Anne C. act. 27, a domestic, called for advice March 18th, 1875. Although we soon lost sight of this case, the amelioration of symptoms after treatment was begun were so general, that we cannot refrain from mentioning it. Temperament; * sanguine—encephalic. General health up to January last had been good. Had considerable laborious work to perform and not being of good muscular development, the consequent effect might be likened to a condition obtained in some cases of anemia. None of the heart affections were known to have occurred to any one of her family relatives. In fact, her diathesis would indicate pulmonary complications. The family with whom she had lived for nearly a year, had lost a child from diphtheria early in January. This patient was under the belief ever since, that she too had diphtheria and it was with some difficulty that we could dissuade her from such an erroneous impression. She was very nervous in consequence.

She stated that in the sterno-clavicular region she experienced a feeling as if her heart was transposed there. The objective symptom, palpitation, was strongly marked there—none at the heart. On auscultation, found bellows-murmur very marked in the same region, with aortic murmur in carotid. Pulsations plainly visible along right carotid, with "fremissement cataire." Heart sounds natural. Pulse 84, compressible and regular. Dry cough occasionally. Ascending stairs, much dyspnoea. Complains of a frightened feeling always. Gets worse retiring. Wakes up regularly about 12 or 1 o'clock A. M.

* Dr. J. Milner Fothergill in his work on "*The Heart and its Diseases*," mentions that of the "*Exciting Causes*" of nervous disorders of the heart, "First comes the temperament. The subjects of palpitation are usually of the nervous type or nervous diathesis of Laycock, persons in whom the nervous element preponderates and who are emotional and susceptible. Thus the nervous constitution of the female sex renders females more liable to it than males." We mention this because a writer in the *Eclectic Medical Journal of Cincinnati* objects in strong terms to the introduction of the temperaments in citing cases in practice. R. E. K.

with a feeling of suffocation and also general apprehension. After lying down on her side, shortly after retiring, noticed a ticking sensation in the left ear. This would stop if she turned over on her back. Among other premonitory symptoms first noticed were pains in the right arm extending to the axilla. Previous to that, had not been troubled — either mentally or physically. We prescribed :

R Tinct. Ceruus Bonplandii 3 iv.

Sig: Take ten drops in water every four hours.

Reported again April 1st. After using the medicine for 36 hours menstruation set in — a week too soon. In a few days the pulsations in sterno-clavicular region, lessened. But after lying down, the same ticking sensation commenced in the right ear. Did not wake up any more after getting asleep, and had not as much apprehensiveness as previously. Medicine made her a little dizzy — fullness. She got out of medicine three days ago and ever since had not felt as well. Pulse 84, regular and compressible. Bellows sound in sterno-clavicular region, very much lessened. Swelling and palpitation of the left external jugular vein, sometimes engorgement of the same. The pulsations of the jugular vein run synchronous with that of the radial artery. After severe exercise, some dyspnoea as before. Prescribed :

R Tinct. Ceruus Bonplandii 3 iss.

Sig: Take ten drops in water every three hours.

May 1st, returned and was much improved in every way. Continued to take the medicine until cured. (Eight months after writing this article we heard that this girl was as well as ever in her life.)

CASE VII.

Rheumatic Pericarditis followed by *Cardiac Dyspnoea* or *false* Angina Pectoris* :

Count de F., a French exile, aet. 46, send for me to call immediately, July 22d, 1875, 10 o'clock P. M. Of the bilious-encephalic tem-

* Much diversity of opinion exists among medical writers, as to the adaptability of the name "*Angina Pectoris*" for certain cardiac affections. Dr. Charles E. Brown-Séquard, of this city, holds that true *Angina Pectoris* means ossification of the coronary arteries, if not petrification of both mitral and aortic valves. Heberden calls it cramp of the heart. Also the neuralgia cardiaca of others. "Dr. J. M. Fothergill says that '*Angina Pectoris*' may be either nervous derangement or associated with histo-necrosis. It may accompany fatty degeneration as a symptom or exist as a nervous affection. In the latter case it is called cardiac dyspnoea or Cardiac Asthma — "*false Angina Pectoris*," In contradistinction from the structural disease bearing a like name. He classes it as a neurosal affection, occurring most commonly in structural diseases of the heart." In treating it, Brunton gave nitrite of amyl, others chloroform, gelseminum, lobelia, etc., from its undoubted effect in dilating the smaller blood vessels, with good results. Diffusive stimulants, agents which will induce ventricular contraction, are indicated, such as *Cereus Bonplandii*, *C. grandiflorus*, *Sal Volatile*, *Camphor*, etc. Or antispasmodics to lessen or relax arteriole spasm, of which remedies not yet mentioned, and if admissible, the reformed physicians of old used to give the Comp. Tinct. of *Lobelia* and *Capsicum*.

perament. Formerly a professor of mathematics in the Polytechnic School of Valençon. Afterwards chief of staff of engineers of Napoleon III. Had received a gun-shot wound in the Franco-Italian war of 1859, the ball entering the left breast and coming out on his right side near the axilla. Had also served in Algiers, where he contracted the dreaded malarial fever.

Family troubles, the cause of his exile, had preyed on his mind incessantly, and made him somewhat dejected in spirits. At present he was engaged experimenting with a non-explosive gunpowder, made so by coating it with a substance that could be removed at pleasure, and on which his partner held a valuable patent.

We found him crouched on two chairs, head thrown back, with chest elevated and thrown forward, and the limbs drawn up against the epigastrium. Breathing laborious. Pulse irregular, strong and full — 78 per minute. Severe pain in epigastric region, passing from the right to the left hypochondria, sometimes extending to the apex of heart. Not much palpitation. Regular impulses of the heart, yet strong, followed by some sharp pains occasionally. Complained also of having pain extending from the forehead, back and down the neck to the left scapula. Extremities cold. Skin clammy. Subject to rheumatic attacks. Had an attack of syncope in the office of a friend the afternoon previous, while discussing business matters rather excitedly. Gave him:

℞. Fl. Ex. *Asclepias Tuberosæ*.

Fl. Ex. *Dioscoreæ Villosæ*, āā ʒ ss.

Sat. Tinct. *Cimicifugæ Racemosæ*, ʒ i.

Misce, Sig: Take a teaspoonful in a tablespoonful of hot water every half hour, until relieved.

After the fourth dose he found himself bathed in perspiration, and fell into a sound sleep. In the morning of the following day he complained of a new life of symptoms. Previous pains in head and epigastrium had subsided.

Again sent for at 8 A. M. — Found him setting up in a chair, feet resting on another. Sudden sharp pains in præcordial region, passing off in the direction of the left scapula. A feeling as if the heart was in the grasp of a lion's paw. Anxious expression of countenance, pale. Tumultuous action of heart, regular in rhythm, with an occasional jerk or purr — "fremissement cataire" throughout the trunk. Pulse small, compressible — 90 per minute. Attack preceded by coldness or chilly sensations passing from the feet to his heart. Tongue coated whitish. Mouth parched, with no desire to drink. Apprehensive feeling. Cannot talk to any one while paroxysms are on. These return every four

or five weeks, according to circumstances. By far the worst one of such an attack, which he ever had. His usual remedy is, "sedative water," the Eau sedative* of the French codex, rubbed over the præcordial region, and thereafter lying in a horizontal position as long as endurable. Has suffered similarly for six or seven years. We gave:

R. Tinct. Cereus Bonplandii, \bar{z} i.

Sig: Take 15 drops at once — then 10 drops hourly for two consecutive doses and every two hours afterward, in a little water.

The next day found him up again. Rather feeble, but able to take some nourishment. Pulse normal. Cardiac pains had gradually subsided after a few doses of the medicine. Had used no other. The succeeding day he attended to his business as usual. Ordered him to take some of the medicine in doses of ten drops, three times a day, until all excitement had passed off, which he did. Avoiding stimulants and other indulgencies, particularly tobacco, to which he was much addicted, this patient remained comfortable for a long time afterward.

NEW YORK, *October*, 1875.

* Eau sedative is made after different formula, weak or strong, as for instance: Mix together, liq. ammonia 5 fl. oz., and tinct. camphor $\frac{1}{2}$ fl. oz. Then dissolve 3 oz. common salt in 3 pints of water, and mix together both solutions. No nicety need be observed.

